

```
1  ccgcctccta gccgccgact cacacaaggc aggtgggtga ggaaatccag agttgccatg
61  gagaaaattc cagtgtcagc attcttgctc cttgtggccc tctcctacac tctggccaga
121  gataccacag tcaaacctgg agccaaaaag gacacaaagg actctcgacc caaactgccc
181  cagaccctct ccagagggtg gggtgaccaa ctcatctgga ctcagacata tgaagaagct
241  ctatataaat ccaagacaag caacaaaccc ttgatgatta ttcactactt ggatgagtgc
301  ccacacagtc aagcttttaa gaaagtgttt gctgaaaata aagaaatcca gaaattggca
361  gagcagtttg tcctcctcaa tctggtttat gaaacaactg acaaacacct ttctcctgat
421  ggccagtatg tccccaggat tatgtttggt gacctctctc tgacagttag agccgatatc
481  actggaagat attcaaactg tctctatgct tacgaacctg cagatacagc tctgttgctt
541  gacaacatga agaaagctct caagttgctg aagactgaat tgtaaaagaa aaaaatctcc
601  aagcccttct gtctgtcagg ccttgagact tgaaaccaga agaagtgtga gaagactggc
661  tagtgtggaa gcatagtga cactgtgatt aggttatggt ttaatgttac aacaactatt
721  ttttaagaaa aacaagtttt agaaatttgg tttcaagtgt acatgtgtga aaacaatatt
781  gtatactacc atagttagcc atgattttct aaaaaaaaaa ataatgttt tgggggtgtt
841  ctgttttctc caacttggtc ttccacagtg gttcgtttac caaataggat taaacacaca
901  caaaatgctc aagggaaggga caagacaaaa ccaaaactag ttcaaatgat gaagacaaaa
961  gaccaagtta tcatctcacc acaccacagg ttctcactag atgactgtaa gtagacacga
1021  gcttaatcaa cagaagtatc aagccatgtg ctttagcata aaagaatatt tagaaaaaca
1081  tcccaagaaa atcacatcac tacctagagt caactctggc caggaactct aaggtacaca
1141  ctttcattta gtaattaaat tttagtcaga ttttgcccaa cctaattgctc tcagggaag
1201  cctctggcaa gtagctttct ccttcagagg tctaatttag tagaaaggtc atccaaagaa
1261  catctgcact cctgaacaca ccctgaagaa atcctgggaa ttgacctgt aatcgatttg
1321  tctgtcaagg tcctaaagta ctggagtga ataaattcag ccaacatgtg actaattgga
1381  agaagagcaa aggggtggtga cgtgttgatg aggcagatgg agatcagagg ttactaggg
1441  ttaggaaacg tgaaaggctg tggcatcagg gtaggggagc attctgccta acagaaatta
1501  gaattgtgtg ttaatgtctt cactctatac ttaatctcac attcattaat atatggaatt
1561  cctctactgc ccagcccctc ctgatttctt tggcccctgg actatggtgc tgtatataat
1621  gctttgcagt atctgttgct tgtcttgatt aacttttttg gataaacct tttttgaaca
1681  gaaaaaaaaa aaaaaaaaaa a
```

FIG. 1

1 MEKIPVSAFLLLVALSYTLARDTTVKPGAKKDTKDSRPKL
41 PQTLSRGWGDQLIWTQTYEEALYKSKTSNKPLMI IHHLDE
81 CPHSQALKKVFAENKEIQKLAEQFVLNLVYETTDKHLSP
121 DGQYVPRIMFVDPSLTVRADITGRYSNRLYAYEPADTALL
161 LDNMKKALKLLKTEL

FIG. 2

1	ggcaaccctt	gcggtccaca	caaagcagga	gggtgggaag	cccagatttg	ccatggagaa
61	attttcagtg	tctgcaatcc	tgcttcttgt	ggccatttct	ggtaccttgg	ccaaagacac
121	cacagtcaaa	tctggagcca	aaaaggaccc	aaaggactct	cggcccaaac	tacctcagac
181	actctccaga	ggttggggcg	atcagctcat	ctggactcag	acatacgaag	aagctttata
241	cagatccaag	acaagcaaca	gacccttgat	ggtcattcat	cacttggacg	aatgcccaca
301	cagtcaagcc	ttaaagaaa	tgtttgctga	acataaagaa	atccagaaat	tggcagagca
361	gtttgttctc	ctcaacctgg	tctatgaaac	aaccgacaag	cacctttctc	ctgatggcca
421	gtacgtcccc	agaattgtgt	ttgtagaccc	atccctgacg	gtgagggcag	acatcactgg
481	acgatactca	aaccggctct	acgcttatga	accttctgac	acagctttgt	tgtacgacaa
541	catgaagaaa	gctctcaagc	tgctaaagac	agaattgtag	agctaactgc	gcaccggggtc
601	aggagaccag	aaggcagaag	cactgtggac	ttgcagatta	cagtacagtt	taatgttaca
661	acagatatat	tttttaaaaca	cccacagggtg	gggaaacaat	attattatct	actacagtga
721	agcatgatatt	tctagaaaaat	aaagtcttgt	gagaactcca	aaaaaaaaaa	aaaaaaaaaa

FIG. 3

MEKFSVSAILLLVAISGTLAKDTTVKSGAKKDPKDSRPKLPQTLSRGWGDQLIWTQTYEEALYRS
 KTSNRPLMVIHHLDECPHSQALKKVFAEHKEIQKLAEQFVLLNLVYETTDKHLSPDGQYVPRIVF
 VDPSLTVRADITGRYSNRLYAYEPSDTALLYDNMKKALKLLKTEL

FIG. 4

1	cggcaaccct	tgccggctcac	acaaagcagg	agggaggaga	gctcagattt	gcatggaga
61	aattttcagt	ctoggcaatc	ctgcttcttg	tggccatctc	tggtactctg	gccaaagaca
121	ccacagtcaa	atctggatcc	aaaaaggacc	caaaggactc	tcgacccaaa	ctaccccaga
181	ccctgtccag	aggttgggga	gatcagctca	tctggactca	gacttacgaa	gaagccttat
241	acaaatccaa	gacaagcaac	agacccttga	tggtcattca	tcacttgga	gaatgcccgc
301	acagtcaagc	tttaaagaaa	gtgtttgctg	aaaataagga	gatccagaaa	ttggcagagc
361	agtttgttct	cctcaacttg	atctatgaaa	caactgacaa	gcacctttct	cctgatggcc
421	agtacgtccc	cagaattgtg	tttgtggacc	cttccctgac	ggtgagggca	gacatcaccg
481	gaagatactc	aaaccgtctc	tacgcttacg	aaccttctga	cacagctctg	ctgcacgaca
541	acatgaagaa	agctctcaag	ttgctgaaga	cagagttgta	gagtcaactg	tacagtgcct
601	caggagcccg	gaaggcagaa	gcactgtgga	cctgccgatg	acattacagt	ttaatgttac
661	aacaaatgta	ttttttaaac	acccacgtgt	ggggaaacaa	tattattatc	tactacagac
721	acatgatattt	ctagaaaata	aagtcttggtg	agaactcc		

FIG. 5

MEKFSVSAILLLVAISGTLAKDTTVKSGSKKDPKDSRPKLPQTLSRGWGDQLIWTQTYEEALYKS
KTSNRPLMVIHHLDECPHSQALKKVFAENKEIQKLAEQFVLLNLIYETTDKHLSPDGQYVPRIVF
VDPSLTVRADITGRYSNRLYAYEPSDTALLHDNMKKALKLLKTEL

FIG. 6

1 AACCCCTAGTT ACCTCACACC AAGACAGATA TGCCAAAGAT TCCACAGCCT
51 CAATAGCATG TGTAGGATAT CTGCTAATAA TTACCTCCTC CTTGCCATCC
101 GTCAGCCACT ATGACAAACT CTGGGTTTTT CCTGACATGA GATTAGGCAC
151 ATGAGTATAG AATAATTATA TCACTATAAT TAACTGTAAC AAATCAAAGA
201 CTTTTTTTTT TAAGTTCCGG AGTATGTGTG TAGGATGTGC AGGTTTGTTT
251 CATCAGTAAA CGTGTGCCAT GGTGGTTTGC TGCACTGATC AACCCAACAA
301 CTAGGTCTTA AGCCAGCCTG CATTAGCTAC TTTTATCAAA TGTATATGGGC
351 TGAATTGTGT CCCCCCAAA AATTCATATG TTGAAGTCTT AATCCCCAGG
401 ACTTCAGAAT AGGATCTTTA CAGAGGTAAT TAAGTTAAAG TAGGTCATTA
451 GGCAGGACCC AAATACAATA TGACTGGTGT CTTATAAGA AAAGGAAAAA
501 AATGACACAG ACAGGTACAG AGGGAAAAAC CATGTGGCAA TACAGGGAAA
551 AGTCATTTAA TATTCAAAAT GGTCCCATAT GTTAATATTA TCCCCATATT
601 ATAGATGGAG AAAGTGAAGT TTTGGGGATG TTAAATGAGA TCTCAGATCA
651 TCCTATGAGC AAGCACCAGG ATGCAGGATT CAGATGGGAA TCTCGTGACT
701 CCAAATCCCA TCCACTTGTT ACTTTCAGTG GATAAGGGAC TGAAGGACTT
751 TGGTCCCAAC TCTGCCCTAA ACTAGTTGTG AGACCTTCAA AAAGTTATGA
801 ATTTTTTGCC ATCTTCATTT ATTCATCTGT AAAATGAAAG ACTGGAATTG
851 AATATTACAA GGGTCTATCT AAGGGCCTGC TAGTTTTAAG AATTTTGCTC
901 AAATCATCGT TTTCAAACCT CTGAAGAAAT TACTTCTATA AATTCATTAG
951 AATTGAAAGG AAATTCAGTA TTTGGAGAAT CACGATTTTG CCCACAGAAT
1001 TCAAGGATTT ATTGGAAAAA TATACATACT TGCAAATGTT TTTGAAATAT
1051 TATGACCTTA ACTCATTTTA AAAAGTCATT TATATAGGGC TTGCATCCCA
1101 TTCATTAACT TTCTGTTGTT AACATTTTCT TCATTCTGAG CTTTTAAAGA
1151 CTGCACACAA CTTTCATGAAC AAAATACAGG ATTAAAATTT TCTGACAGAA
1201 AATTTAAATT CCAGTTTTAA AATCTTCAGG GAGTAATTAA ATGGTCTTGA
1251 GGGGAAAAAA AACTTGGTTG CAGACCTTAG TTTTtaggtc TGAGAAAATG

1301 GAGTAAATGG CTTCTGCTT GCGTGGCAGG AAAGTTTGCC TTAAATAAG
1351 AGATTATCTG TGAAATACCT TTGAACTCTG TGGAGGGAAG TTGCTGCATA
1401 CATTCAATGG CAAGGCATTT ATTACAAGCT CACGATATTA GGCTGTTTTT
1451 TTTTTTTTTT TTGCCAATAC TTCCTCAGTT TTGAAAAATT ACGTGGGTTA
1501 CTTGATTTGT ATTTTTTTTC ATACCTGTAG AAGTTAGGGT GCATTGTTTT
1551 GACAGGAGCA GGAAGTATT GTAGAAAATA ATTTTATCA TAATGGAGTA
1601 TGGCAGGTTA TATGACTGCG AGGATCAGAA TTGTGAATCA TCTCTGTGT
1651 GTCTTCAAGT AAATAAGGC AATCTGCCCA CGGAGCAGAA AAAAAATCTA
1701 CAACTACAA ACTCTGTCCA ATCATGTAAA GACAAATCAG CCTTCAGGCA
1751 AATCAAATGT CTTCAATCAA AGTCTACCTG GATTTGGCAC TCTGCCCATC
1801 GTTTCAAAAC CTCTTAACAA TACGTTTCAC AAATAGTTAA AACATGCAT
1851 ACTGAAAAGC ATACTTTTGC AATGTTATTT TTAAAAACAA GGAACCTCTT
1901 AACCCAGGGA AGATAATCAC TTGGGGAAAG GAAGGTTCGT TTCTGAGTTA
1951 GCAACAAGTA AATGCAGCAC TGGTGGGTGG GATTGAGGTG TGCCCTGGTG
2001 CATAAATAGA GACTCAGCTG TGCTGGCACA CTCAGAAGCT TGGACCGCAT

FIG. 7

1 AAAGGTCTAG AAAGAAACCT TTAAATGAG TGAACCTTAC CATACCTAGA
51 AATGCTGTGG GCTAGTGACT CTTGAAATAA CTCCATTTGC TTATGCTTCT
101 AAAAGGTCTA CAGAGACCAT TTTTAAATAA GATGATTGAT TAAAAAAAC
151 TGATTTGAGG TAAAAACCTT AACTAGAATT GCTCTCACAT ATCTAAATAT
201 CACTATTTAG CCTTTAGTTC TATTCAAACC ATTATTTTAC AGATTAGAAA
251 CACCAAACAA ACGATTAAGC AAACAAAAAT AGAACAGTCA ATAGTTTTCT
301 AAAGGCCCTA CAATTAGTTG AGGGCAGAGC TAGGAGGAAA GCCAGGGCTC
351 TTCTACTCCA CTATCTTAGG CATTGGGAAA TGGGTGGGAT TTCGGGTCAA
401 TTACAGTCAG CATCCTGCTT CCACACTCTG GATGATGATA TCAGAGGTGA
451 CACTGAACAC CCTGAAACTT TAGTTTCCAC GCCTGTAACA GAGTTCCATG
501 CAACAGTTCA GAGCGACATA GTCGTGAACA TAGAGTGAAC TGAGGAAGAG
551 GAAGAGGCTT GGGATGAACG TAGGGTCCCT GCTTCCACAG GAACAGGACA
601 GCCTGGGAGG CTGAAGCATC GGCGATTCAC CTTGCTCAA TCCTGGAGGC
651 TCCACACAGA CCATTGATGT GTCAGCAGCG TTAGGTTCTT CTCTTCTTGG
701 CCTGTAGATG AAGTCATTAT GTGCCTGTGT CTCTGACCTA AGTTTCTTTC
751 CTATGAGAAT AACAGTCATA TTAGATTAGA ACCCAGTCTA ATGACCTATT
801 TCACTTACTT TAAATTTCTT ATTCATTTAT TTCAATTACT TTCATTTTAT
851 TTACTTACTG TGGTACTTAG AATCAAATTC AGAGCCTTGC ACATACTTAA
901 CAAATGCTTA ATCTCTCTTT AAGACCCTCT CTCTGTGTAT GATCATCTGA
951 TGAGGTCCTG GGAATTACAG CACATGGATT CCTTTAAAC ACATCTCAAC
1001 CATACCTCTT GGTAATTAAA AACATCTCTA ATTTGCTGTA ATTCACTATA
1051 ATGATATAAC AGCTATCCTG GAGTATTCCT GTGTCTAATT TCATGCTGGT
1101 AAAGCTCTGG TTATGGTACA ACAAAGATGA GGTAATTATT ACAACATCCT
1151 GCACATACTG GGGTATCTGT GGCATCCTTG GTACATCAGT CCTGAAACGA
1201 AGCCAATATC TACAGTAGCT TTGAGATGCG TAGGCGAGGG TAATTCCTTT
1251 ATGCTACTGA GGTGGTACTG TGTGGTCATT CTTTGTGATC TCCTGATGTT
1301 GCGATGCACA CCCACAAACA CACATTTGTA CACATATATT AATCATCAGG

1351 GCCATTATTA GCTCACAACA TTATCCTATC CTCCTTTCT TCAATAACCT
1401 CTCCGAGTTT GAAGAGTCCA TGGCGATGAT TTGCGGGGTT TATACCTGTG
1451 ATTAAAGCGC ACACAAAAAA TGATATTGTG GAAAATAACA TGTCTTGTGA
1501 TCGAGCATGG CCAGCTGTAT AACTGTAAGA AGGATTAGAA CTGTGAATCA
1551 TCCTTAAGAA AAAAAAAAAA AAAAAAAG CTAAATAAAT GCAATCTGCC
1601 CAAGAGGGAG GAAATGAATA CCTATAAACC ACAACTTCTA TCCAATCACA
1651 TACAGACAAA TCAGCCTTCA GACCAATCAA ACGTCTTCAT TTAAAGCTTA
1701 CCTGGACTTG GCATACTGCC CAGCTTTTCC AAAACTACTC ACAATAATAC
1751 CTTCAACAAC AGTTAAAAAA CGCTGGTACT CAAACAAAAT CAACAGCCTT
1801 TTCAACGACT GCTTTAAAAA AGACCAAACA AACAAACAAG GAACGTCTTA
1851 ACCCAGAGAA GACAATTGCT TGGGAGAGGA AAAGTTTGCT TCTGAGTTAG
1901 CAGCCTGTGG AAACAGGATT AGTGGGTGGG ATTGGGGTGT GCTCTGCCCA
1951 TAAATACAGG CTCAGCGCTG CGCTGGCACA CTGAGAACT TGGACGGCAA
2001 CCCTTGCGGC TCACACAAAG CAGGAGGGTG GGAAGCCCAG GTAAGGCAAT

FIG. 8